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- (71) Applicant (for all designated States except US): INVISTA TECHNOLOGIES S.A. R.L. [LU/CH]; Talstrasse 80, CH-8001 Zurich (CH).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): McADAMS, Carina, Araullo [US/US]; 626 Chowning Place, Wilmington, NC 28402 (US).
- (74) Agents: CLEMENTS, Gregory, N. et al.; Dougherty, Clements & Hofer, 1901 Roxborough Road, Suite 300, Charlotte, NC 28211 (US).
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(54) Title: TOLUATE ESTERS FOR USE AS REACTIVE AND NON-REACTIVE DILUENT IN POLYMER APPLICATIONS

(57) Abstract: This invention relates to toluate ester compositions and their use as solvent, plasticizers, extender and/or diluents in binder formulations, a method of producing such ester compositions, as well as polymer compositions containing such liquid ester compositions. The method of making toluate based esters by reacting methyl-p-toluate with ethylene glycol, diethylene or triethylene glycol, butanediol, etc. More particularly, this invention relates to the mono- or di-ester of methyl toluic acid with a diol containing 2 to 6 carbon atoms that are low viscosity liquids at 25° C. The most common polymer that employs plasticizer is polyvinyl chloride (PVC). Typical amounts of plasticizer in PVC are from about 3 wt. % to about 50 wt. %. Phenolic resins generally require solvents, diluents and/or extenders that reduce the volatility and viscosity of the resin, especially when it is used in building and automotive products. Typical amounts of solvent are from about 5 wt. % to about 65 wt. %.